

REMARKS/ARGUMENTS

Status of the Claims

Claims 39 – 41, 65 – 68, and 71 – 74 are pending in the application. In the office action dated January 26, 2005, the examiner pointed out that claims 69, 70, and 75 – 78 are directed to a non-elected, distinct invention as illustrated in Figures 18 & 19. These claims are canceled from this application but the Applicants reserve a right to pursue those claims through a divisional application.

Section 103(a) Rejection

In the office action dated January 26, 2005, the examiner rejected claims 39 – 41, 65 – 68, and 71 – 74 under 35 U.S.C. 103(a) as being unpatentable over Sutter (US 3643663) in view of Rydell et al. (US 5445638). The Applicants respectfully requests that the rejections be withdrawn for the following reasons. First, the combination of Rydell and Sutter do not implicitly or explicitly disclose an *adjustable* stop member. Secondly, the two additional references, Auth (US 4492231) and Cordis et al. (US 5472443), also do not suggest the implementation or the need for an adjustable stop member, rather they teach away from it. Lastly, no prior art teaches or suggests the specific problem (excessive healing time because too *high* a pressure is applied to the weld) or the solution (an adjustable stop mechanism for *limiting* the force applied to the weld) that the Applicants disclose in detail.

First, the combination of Rydell and Sutter do not implicitly or explicitly suggest an *adjustable* stop member. As specified in Applicant's response dated October 18, 2004, Rydell does not disclose that the mechanism by which it limits the extent of closure of its forceps is in anyway adjustable. Applicant assumes that examiner's subsequent combination with Sutter indicates that the examiner agrees with this assertion. However, Applicant respectfully asserts that Sutter does not disclose an *adjustable* stop member, lug, spacer, or knob, as asserted by the examiner. Sutter refers to an insulating spacing member (item 7 in the drawings) in the written description (Col. 2, Lines 71 – 74) and in claim 5 (Col. 4, Lines 34 – 38). In neither of these sections does Sutter explicitly disclose that the insulating stop member can be adjusted. Furthermore, by asserting that the stop is used for insulating purposes alone, there is no suggestion within Sutter that the stop member should be in any manner adjustable to be made suitable for some other purpose.

Secondly, the two additional references mentioned by the examiner, Auth (US 4492231) and Cordis et al. (US 5472443), also do not suggest the implementation or the need for an adjustable stop member, rather they teach away from it. Similar to Sutter, the Cordis reference teaches an insulating stop member (45), but neither implies nor suggests that the stop be adjustable (Col. 10, Lines 45 – 54). This reference states that "stops are arranged to prevent the distal ends of graspers from contacting each other when forceps are closed together." (Col. 10, Lines 51 – 53). The use of the term "arranged" cannot be read to imply adjustability, particularly in light of the drawings, which show the stop as a fixed means.

Auth also discloses an insulating stop for the purpose of preventing microwelding of the forceps' jaws together. (Col. 7, Lines 25 – 34). Auth further discloses that the stop may be a rivet or plastic coating. (Col. 7, Line 66 – Col. 8, Line 2). These two embodiments do not teach adjustability or removability. A plastic coating is clearly permanent and the term "rivet" has been determined to be a permanent fastener. See K-2 Corp. v. Salomon S.A., 191 F.3d 1356, 1365 (Fed. Cir. 1999) ("A rivet or a laminate, to the contrary, is meant to remain permanent, unremovable unless one is bent on breaking the permanent structure apart.")

Lastly, no prior art teaches or suggests the specific problem (excessive healing time because too *high* a pressure is applied to the weld) or the solution (an adjustable stop mechanism for *limiting* the force applied to the weld) that the Applicants disclose in detail. The current invention has been designed with the purpose of improving the performance of bipolar high-frequency electrocoagulation methods. The Applicants have disclosed the deleterious affects of exerting too low or too high a pressure on the tissues during the bonding process. (See Page 16, Line 7 – Page 17, Line 2). If the pressure is too low, the resultant bond is weakened and the tissue is more likely to stick to the electrode. If the pressure is too high, the time for the tissue to heal after bonding is increased. (See Page 16, Lines 13 – 18).

It is this latter problem (resulting from excessive pressure) that the adjustability feature of the present invention solves. The current invention identifies the effects of exerting too high a pressure on the weld (Page 16, Lines 13 – 18) and then proposes a solution to this problem. This solution is to provide an adjustable stopping mechanism on the arms of the forceps so that "further deformation on the arms [of the forceps] under the pressure from the surgeon's fingers is limited." (Page 46, Lines 2 – 4). The calculations for the appropriate maximum pressure are disclosed at length within the specification. (Page 46, Line 4 – Page 48, Line 8). This section of the specification also details how adjustable spacers (106), lugs (104) and knobs (108) are used to limit the extent of the force applied by the surgeon's fingers.

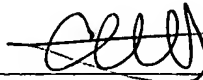
The showing of a suggestion, teaching, or motivation to combine references must be "clear and particular." In re Dembiczak, 175 F.3d 994, 999 (Fed. Cir. 1999). In the case of the present invention, no prior art gives a clear and particular motivation to adapt an adjustable stop mechanism to a welding forceps to limit the pressure that can be exerted on the forceps; rather the prior art instead focuses on the affects of too low a pressure being exerted. For instance, the Auth reference specifically teaches that tissue may stick to the electrode. (Col. 2, Lines 49 – 62). Auth proposes to solve this problem by making the electrodes out of a material with a high thermal conductivity so that heat may be transferred away from the tissue-electrode interface. (Col. 3, Lines 39 – 43). However, Auth never suggests a need or desire to provide a maximum limit to the pressure exerted on the tissue between the forceps.

Claims 39 and 72 have also been amended to state that invention provides tissue welding that forms a weld to reconnect the tissue. Applicants' tools are used for live tissue bonding that allows reconnecting the tissue so that it will quickly heal with as little scar tissue as possible.

Conclusion

In view of the foregoing arguments, Applicants respectfully ask that the rejections be withdrawn. Believing that all things raised in the Examiner's January 26, 2005 office action have been addressed, the undersigned respectfully requests that the application be allowed and passed to issue.

Respectfully submitted,



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